

REMARKS/ARGUMENTS

The Applicant respectfully requests further examination and reconsideration in view of the above amendments and arguments set forth fully below. Claims 41-58 and 63 were previously pending in this application. Within the Office Action, Claims 41-58 and 63 have been rejected. By the above amendments Claims 41, 49, 56-58, and 63 have been amended. Accordingly, Claims 41-58 and 63 are currently pending.

Objections to the Claims

Within the Office Action, Claims 41 and 63 have been objected for the following informalities. Specifically, it is stated that Claim 41 recites “the appropriate signal lines” in line 6 and “the handset port receive path” in line 11 of the claim, and that there is insufficient antecedent basis for the limitations of the claims. It is suggested that “appropriate signal lines” and “a handset port receive path” would be appropriate corrections. It is further stated that Claim 63 recites “the appropriate signal” in line 12, and that there is insufficient antecedent basis for this limitation in the claim. It is suggested that “appropriate signal line” would be appropriate correction.

By the above amendments, Claims 41 and 63 have been amended to adhere to the principles of antecedent basis. Accordingly, the Applicant requests that the objection be withdrawn.

Rejections under 35 U.S.C. § 112

Within the Office Action, Claims 41-58 and 63 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, it is stated that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time application was filed, had possession of the invention. The Applicant traverses these rejections.

It is stated within the Office Action that Claim 41 recites “automatically determines which of the plurality of signal lines from the handset port comprise *the handset port receive path*” (emphasis added). The Applicant respectfully submits that Claim 41 does not recite this limitation. Instead, Claim 41 recites, in part, “automatically determines which of the plurality of signal lines from the handset port comprise *appropriate signal lines*” (emphasis included).

During the interview on January 27, 2009, the Applicant and Examiner proposed amendments to the independent claims to recite “handset port comprising appropriate signal

lines” such that the independent claims recite the limitation, in one form or another, “automatically determines which of the plurality of signal lines from the handset port comprise *appropriate signal lines*” (emphasis included) in order to overcome the 112 rejection. As discussed in the Interview of January 27, 2010, ample support is provided throughout the specification to support the automatic detection system.

The present specification teaches that a handset port 202 is a 4-wire port (plurality of signal lines) for coupling to a telephone base unit. [Specification, page 7, lines 6, 7; Fig. 7] A handset port receive path is the specific pair of pins on the handset port which bring a dial tone from the telephone base unit to the handset port. [Specification, page 4, line 10] A Smart Interface Technology (SIT) analog interface 200 selects and tests pairs of pins from the handset port until the dial tone is detected. [Specification, page 10, line 9; page 13, lines 23-26] Specifically, under control of a digital MCU 100 (Fig. 7), an addressable latch (Fig. 8) manipulates a switch array 2, both of which are within the SIT analog integrated circuit 200, by sequentially coupling pairs of line input ports until the dial tone is sensed by the digital MCU 100 in the receive channel. [Specification, page 10, line 9; page 13, lines 23-27] The present specification states that:

The SIT “Automated 800 Learning Sequence” begins by searching for the preamble sent by the Host. Once the preamble is selected, the proper receive lines are located. The receive channel sensitivity is then adjusted in comparison to a receive level reference. Upon locating the proper receive lines, the transmit lines are selected and their sensitivity is adjusted in comparison to a transmit level reference signal. [Present specification, page 7, lines 9-13]

The present specification further states that:

A receive signal Rx REF OUT of the analog integrated circuit 200 is coupled to the analog/digital (A/D) input of the digital MCU 100 and provides a sample of the input signal which the analog integrated circuit 200 receives from the telephone base unit. The digital MCU 100 uses this information to determine if the appropriate line configuration has been selected and to control the receive and transmit channel sensitivities.

A signal TONE OUT from the digital MCU 100 is coupled to an input TXREF of the analog integrated circuit 200 and allows the digital MCU 100 to provide a 1 KHz calibration transmit tone, through the analog integrated circuit 200, to facilitate the appropriate selections of the transmit lines and transmit channel sensitivity setting. [Present specification, page 7, lines 18-27]

The appropriate signal lines are automatically determined because the SIT analog interface 200 selects and tests pairs of pins for the presence of a dial tone under the control of a programmed

microprocessor MCU 100. [Specification, page 7, lines 14-23; page 10, lines 8-10; Figs. 7 and 8] The programmed MCU 100 manipulates a 32-bit latch which controls a 4x4 crosspoint switch 2 and a select array 3, thereby selecting a pair of wires from the handset port to test for dial tone. [Specification, page 13, lines 11-15 and 22-27; Figs. 7 and 8] One order for selecting pairs of wires from the handset port to be tested for dial tone is shown in Figs. 4 and 5 under the column heading ,“Dial Tone Detection.”

The above description confirms that a digital MCU (control logic), coupled to a switch array (switch matrix), automatically determines which of the plurality of receive or transmit lines (signal lines) from the handset port interface comprise appropriate signal lines, determines an appropriate (preferred) switch configuration from among a plurality of switch configurations based upon which of the plurality of lines from the handset port interface comprise the appropriate signal lines, and sets the switch array (switch matrix) to the appropriate (preferred) switch configuration, the appropriate (preferred) switch configuration coupling the handset port receive path to a headset receive path or other accessory configured to work with the base unit through appropriate signal lines. For at least these reasons, one of ordinary skill in the art would recognize that the Applicant had possession of the claim limitation *a control logic, coupled to the switch matrix, that automatically determines which of the plurality of signal lines from the handset port comprise appropriate signal lines, determines a preferred switch configuration from among a plurality of switch configurations based upon which of the plurality of signal lines from the handset port comprise the appropriate signal lines, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port receive path to the headset receive path* in Claim 41. Therefore, Claim 41 is fully supported and described in the specification and overcomes the rejection.

For the above stated reasons, the Applicant respectfully submits that the independent Claim 41 is fully supported by the Specification in compliance with 35 U.S.C. § 112, first paragraph, written description requirement, and is therefore allowable.

Furthermore, as discussed in the Interview of January 27, 2010, the Examiner indicated that incorporating *handset port comprising appropriate signal lines* in all the independent claims based on the original specification will overcome 112 rejection.

The Applicant respectfully submits that the same arguments made above with respect to the patentability of independent Claim 1 are applicable to the patentability of independent Claims 51, 56, 57, and 63 as well.

Claims 42-50 are all dependent on the independent Claim 41. Claims 52-55 are all dependent on the independent Claim 51. Claim 58 is dependent on the independent Claim 57.

As discussed above, the independent Claims 41, 51, 56, 57, and 63 are all allowable. Accordingly, Claims 42-50, 52-55, and 58 are all also allowable as being dependent on an allowable base claim.

Conclusion

For the reasons given above, the Applicant respectfully submits that the Claims 41-58 and 63 are in condition for allowance. Should the Examiner have any questions or comments, the Examiner is encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

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By: /Thomas B. Haverstock/

Thomas B. Haverstock
Reg. No.: 32,571
Attorneys for Applicants